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EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/239,907	MACCORMACK ET AL.
	Examiner	Art Unit	
	Scott Beliveau	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 May 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,3-11 and 13-46</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,3-11,13-42,45 and 46</u> is/are rejected.

7)☒ Claim(s) <u>43 and 44</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 November 2002</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every

feature of the invention specified in the claims. Therefore, the "first control circuit" or

receiver processor (IA: Page 15, Para. 5) (ex. claims 1, 10, 11, etc.), as well as the particular

"methods" being performed by these the illustrated system components (ex. claims 11, 13-

15, 18, 19-20, 30-33, and 36-37) must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior version of

the sheet, even if only one figure is being amended. The figure or figure number of an

amended drawing should not be labeled as "amended." If a drawing figure is to be canceled,

the appropriate figure must be removed from the replacement sheet, and where necessary, the

remaining figures must be renumbered and appropriate changes made to the brief description

of the several views of the drawings for consistency. Additional replacement sheets may be

necessary to show the renumbering of the remaining figures. Each drawing sheet submitted

after the filing date of an application must be labeled in the top margin as either

"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in

abeyance.

Response to Arguments

2.   Applicant's arguments with respect to claims 1, 3-10 and 39-42, 45, and 46 have been

considered but are moot in view of the new ground(s) of rejection.

3.   Applicant's arguments filed 09 May 2005 have been fully considered but they are not

persuasive with respect to the rejection of claims 11 and 13-20 under Dokic in view of the

ADSP-2100 Family User's Manual – Chapter 4: Data Transfer.

With respect to applicants' arguments regarding claims 11 and 13-20, applicant's argue

that the interpretation of the claimed memory as including memory "205" and data buffers

"200" and "202" is unreasonable because they do not store "packet identifiers corresponding

to data packets required by the receiver". Applicants note that the buffers load all packets in

the transport stream, whether the packets are required or not. However, as argued, if all of

the packets are stored in the aforementioned buffers, then it would logically follow that both

those which are required as well as those which are not required would be stored (even if

only temporarily); thereby meeting the claimed limitations. With respect to the buffers "200"

and "202" not being separate from the data stream, the examiner relies upon a broad

interpretation of what is meant by separate from in order for such a limitation to be supported

by the specification as originally filled. The instant application similarly buffers and/or

stores received packets in memory as well as stores packet identifiers corresponding to data

packets required by the receiver in memory "400". Taking a very narrow interpretation of

what is meant by "separate from" (ex. the very fact that the particular information is buffered

and/or stored results in it not being "separate from") would render the claims as being not

enabled by the specification as originally filled. Rather, the examiner is interpreting

"separate from" simply to mean that both the data stream and the memory are distinctive

entities in their own rights. For example, the memory is a distinctive or separate element

regardless of its particular storage of data.

4.   Applicant's arguments filed 09 May 2005 have been fully considered but they are not

persuasive with respect to the rejection of claims 21-38 under Dokic in view of Blatter et al.

With respect to applicant's arguments regarding the combined teachings of Dokic and

Blatter, the examiner respectfully disagrees. With respect to "outputting address

information", examiner respectfully refers applicants to the Blatter reference for this

teaching. In particular, the examiner refers applicant to the section of Blatter which discloses

that the particular usage of memory mapping between control and/or encryption information

and particular packet identifies which are retrieved in association with the processing of the

received packets (Blatter: Col 4, Line 56 – Col 5, Line 18). Accordingly, it is the examiner's

understanding that the particular memory address information would need to be "outputted"

in conjunction with the processing of the received packets.

In response to applicant's argument regarding the particular physical combination of

elements between Dokic and Blatter such that the particular combination would render the

Dokic system unsuitable for its intended purpose, the test for obviousness is not whether the

features of a secondary reference may be bodily incorporated into the structure of the primary

reference; nor is it that the claimed invention must be expressly suggested in any one or all of

the references. Rather, the test is what the combined teachings of the references would have

suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871

(CCPA 1981). In the instant case, the DSP of Dokic comprises a "first memory structure" [205] that stores information that enable the DSP to demultiplex and appropriately process the received transport stream by identifying packets of interest. The Blatter reference discloses a similar structure [45] which is construed as meeting both the claimed "first data structure" and "second data structure" in so far as it comprises both "addressing information that is accessed based on packet identifiers" and "control information that is accessed based on addressing information extracted from the first data structure" (Blatter: Col 4, Line 56 – Col 5, Line 18) in conjunction with the particular usage of memory mapping between control and/or encryption information and particular packet identifies which are retrieved in association with the processing of the received packets. The Dokic reference discloses an MPEG signal demultiplexing system using a decoupled architecture such that the DSP demultiplexes the received stream and provides a limited interpretation of the information received for subsequent display. The decoupled architecture "speeds up" the processing over a non-decoupled architecture. However, the reference, does not particularly teach away from all modifications to what may be considered as a necessary part of a limited interpretation process in order to generate a usable picture or other modifications associated with faster processing of PSI information. For example, if an encrypted stream such as that associated with the contemplated video-on-demand service is received, it would be necessary to descramble that image prior to display. Accordingly, the particular modification to the existing memory structure of Dokic so as to further comprise additional structural information associated with the particular interpretation of a received transport stream is not considered to be taught away from by the reference itself.

In response to applicant's argument that there is no suggestion to combine the references,

the examiner recognizes that obviousness can only be established by combining or modifying

the teachings of the prior art to produce the claimed invention where there is some teaching,

suggestion, or motivation to do so found either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837

F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941

(Fed. Cir. 1992). In this case, the Dokic reference is directed towards MPEG signal

demultiplexing using a decoupled architecture. The Dokic reference further utilizes PSI

information. The analogous art Blatter reference teaches a system and method which further

advantageously speeds the processing of PSI information and further advantageously

facilitates the processing of both encrypted and/non-encrypted information.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

6.   Claims 1 and 3-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention.

As set forth in the specification as well as applicant's previous arguments, the "third control circuit" corresponds to the illustrated search engine [322] and the input module corresponds to the illustrated input module [100]. The specification sets forth that the search engine generates a match signal responsive to finding a match and subsequently instructs the "second control circuit" or transport processor [320] to access a particular address for information needed so as to control the input module [100] to process the received signal which may include the particular descrambling of the received information (IA: Page 9, Para. 7 – Page 12, Para. 2; Page, 20, Para. 3 – Page 21, Para. 2). The claim sets forth that the "second control circuit" or transport processor [320] further "controls processing of the input data packet responsive to the match signal by the input module". However, as disclosed in the prior section of the specification, while the "second control circuit" is operable to control processing of the input data packet by the input module responsive to the match signal, the match signal is not generated by the input module. Rather, the particular match signal as disclosed in the specification and required by the claim to be generated by the "third control circuit" (ex. a "third control circuit . . . for setting a match signal to the to the second control circuit responsive to a match"). No further art rejection is being applied in light of the logical inconsistency required by the claim; given that the claim initially sets forth that the "third control circuit" is responsible for generating the match signal and latter claims that the distinctive input module is responsible for the match signal.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 39-41, 45, and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by

Dokic (US Pat No. 5,959,659).

Claim 39 is rejected wherein the Dokic reference discloses a "receiver" [100] for

"processing a packetized digital data stream".. As illustrated in Figures 3 and 5, the

"receiver" [100] comprises an "input module" [104] to "receive and process a data packet"

associated with an MPEG-2 transport stream" a "memory" [205], and a "receiver processor"

[106] to "control storage of desired packet identifiers and associated control information in

the memory" (Col 8, Lines 24-31; Col 13, Lines 13-26). The receiver further comprises a

"transport controller" [102] having a "transport processor" [204] to "extract a packet

identifier from a packet in the input module" and a "search engine to search the memory for

a match of the extracted packet identifier to a desired packet identifier stored in the memory".

Subsequently, "responsive to a match the transport processor retrieves from the memory

control information associated with the desired packet identifier stored in memory" such as

control information serving to designate the particular packet type and "controls processing

of the received data packet by the input module based on the retrieved control information"

such that it is directed to the appropriate packet buffer [206/208/210] (Col 7, Line 49 – Col 9,

Line 6).

Claim 40 is rejected wherein the "transport processor generates a control signal to control

processing of a packet by the input module based on associated control information retrieved

from the memory" (Col 8, Lines 53-67).

Claim 41 is rejected wherein the "input module discards a packet in response to the

control signal" (Col 8, Lines 64-67).

In consideration of claim 45, Figure 3 of the Dokic reference discloses a "receiver"

[1000] for "processing a packetized digital data stream". The "means for receiving a data

packet" [112/114], a "means for retrieving control information associated with a received

data packet" [102], and a "means for controlling processing of a received data packet by the

means for receiving a data packet" [106].

Claim 46 is rejected wherein the "means for receiving control information" [102] (Figure

5) comprises a "memory for storing packet identifiers and control information associated

with desired packets in the digital data stream" [205] (ex. information identifying the

particular PID as well as information identifying the particular type of PID), a "search

engine" and a "transport processor" [204] (Col 8, Lines 7-67).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

10.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent

any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to

point out the inventor and invention dates of each claim that was not commonly owned at the

time a later invention was made in order for the examiner to consider the applicability of 35

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11.   Claims 11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dokic (US Pat No. 5,959,659) in view of the ADSP-2100 Family User's Manual – Chapter 4:

Data Transfer.

In consideration of claims 11 and 20, the Dokic reference discloses a method of

"demultiplexing" or "decoding a digital data stream" wherein the "digital data streams . . .

including data packets having a packet identifier" such as those defined by the MPEG-2

specification (Col 1, Lines 19-23; Col 2, Lines 45-65). The method comprises "inputting the

digital data stream" (Figure 3; Col 5, Line 60 – Col 6, Line 9) and "storing in a memory

separate from the data stream" [205] (Figure 3) and "under control of a first control circuit"

[106], the "packet identifiers that correspond to data packets required by the receiver" (Col 8,

Lines 28-31 and 58-60; Col 9, Lines 10-23). The system "extracts under the control of a

second control circuit" [204], a "packet identifier from a data packet in the input digital

stream", "determines, under the control of a third control circuit" [204] "whether the

extracted packet identifier matches one of the stored packet identifiers", sets a match signal

responsive to a match determined by the third control circuit", and "demultiplexes under the

control of the second control circuit, the input data packet responsive to the match signal"

(Col 8, Lines 20-52; Col 9, Lines 18-43).

With respect to the limitation pertaining to "outputting an address", the Dokic reference

does not explicitly disclose nor preclude details pertaining to the retrieval of information

through a "memory address". The reference explicitly discloses that the preferred

embodiment of the digital signal processor is a DSP2111 manufactured by Analog Devices®

(Col 7, Lines 53-55). The ADSP-2100 Family User's Manual – Chapter 4 describes that the

circular buffers rely on "addresses" in order to determine where to locate the next piece of

information in a circular buffer may be located (Sections 4.2.3 – 4.3.2). Accordingly, it

would have obvious to one of ordinary skill at the time of the invention to utilize the

teachings of the ADSP-2100 User's Manual such that the embodiment would implicitly

"output an address in the memory responsive to a match" in order to know where in the on-

board memory [200/202/205] to retrieve the "entire packet" comprising both the identifier

and "control information associated with the packet identifier" for the purposes of

implementing the preferred embodiment using components explicitly disclosed by Dokic.

As to the limitation pertaining to the "control information", the claimed language is not

limiting other than to require that the "control information" is something that is "associated

with the packet identifier". The Dokic reference teaches that the MPEG-2 transport stream

may comprise packets of "control information" such as the program map table (PMT) or

program association table (PAT) from the MPEG-2 transport stream (Col 4, Lines 22-27).

These program specific information (PSI) tables are associated with reserved packet

identifiers (PID) (ISO/IEC 13818-1: Section 2.4.4). As such, the Dokic reference teaches

that the PID from the received packet is parsed from the transport packet to identify the type

of data carried by the transport packet. Accordingly, "control information" may be

temporarily stored in the packet buffers [200/202] prior to being transferred to the host

processor [106] (Col 9, Lines 29-43).

Alternatively, it is further noted that the packet header may further comprise "control

information" in the form of timing information (PCR) used in the decoding of the payload.

The packet buffers [200/202] or "memory" are disclosed to store the entire transport packet

comprising "control information associated with the packet identifier" (Col 7, Lines 66-67 –

Col 8, Lines 1-4). The Dokic reference goes on to suggest that either the "entire packet" or

the payload may be forwarded from the "memory" (Col 9, Lines 39-43). The claim language

is subsequently not limiting such that the "entire packet" comprising both the identifier and

the "control information associated with the identifier" contained within the packet header

may be "accessed" and "demultiplexed".

Claims 13 and 14 are rejected in view of Figure 5 wherein "the second control circuit"

[204] controls the transfer of and/or processes "the input data packet to a destination" such as

data buffers [206/208/210] or host microprocessor as "identified by the control information"

(Col 8, Lines 31-37, 53-67). It is taught that should the "input data packets" contain private

data, the entire packet will either be "transferred". Alternatively, the packet may be

"processed" such that only the payload data is "transferred" (Col 9, Lines 39-53).

Claim 15 is rejected wherein the Dokic reference teaches that the packet is "discarded" if

a "match" is not found (Col 8, Lines 51-52)

Claims 16 and 17 is rejected wherein the reference teaches a method/apparatus for the

interpretation and demultiplexing of received MPEG-2 transport packets (Col 7, Lines 49-

59). The MPEG-2 standard (incorporated by reference) defines a transport stream as being

logically constructed from a "packetized elementary stream" or PES packets.

In consideration of claim 18, the component elements of the "input" data stream are well

known in the art, as evidenced by the MPEG-2 specification,. Figures 1-2 of the Dokic

reference illustrates that the "input data packet comprises program specific information" or

PSI tables (Col 2, Lines 3-19). As aforementioned, the receiver uses these PSI tables to

derive PIDs that corresponds to desired programming which are subsequently used by the

"second control circuit" [204] to "retain only those data packets having sections required by

the receiver" (Col 2, Lines 29-44; Col 8, Lines 20-31, 48-52).

Claim 19 is rejected wherein the "third control circuit" [204] "systematically" searches

the transport packet buffers [200/202] for a "match". Figures 6A-C further illustrate a

"systematic" method for "searching the memory" in conjunction with the demultiplexing

process.

12.   Claims 21-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dokic (US

Pat No. 5,959,659) in view of Blatter et al. (US Pat No. 5,844,595).

In consideration of claims 21 and 29, as aforementioned, the Dokic reference discloses a

decoder that may function as a "set top box" or "receiver for the demultiplexing digital data

streams . . . including data packets having a packet identifier" such as those defined by the

MPEG-2 specification (Col 1, Lines 19-23; Col 2, Lines 45-65). Figure 3 illustrates a block

diagram of the "receiver" architecture comprising: "input circuitry for receiving the digital

data stream" [112] (Col 6, Lines 10-12), a demultiplexing section [104], and a control section

[108] (Col 5, Line 60 – Col 6, Line 9). The demultiplexing section, as illustrated in Figure 5

comprises a data structure [205] for storing packet identifiers that correspond to data packets

required by the receiver (Col 8, Lines 26-31) and a "first" and "second control circuits" [204]

of the digital signal processor [102] for "extracting a packet identifier from a data packet in

the digital data stream input", "determining whether such matches one of the packet

identifiers in the first data structure", and "responsive to a match" is operable to "demultiplex

the input data packet" (Col 8, Lines 20-52; Col 9, Lines 18-43).

The reference, however, does not explicitly disclose nor preclude the particulars

pertaining to the "first" and "second data structure" as particularly claimed nor does it

disclose the particular usage of encryption/decryption in conjunction with the MPEG-2

transport as is understood in the art. The Blatter et al. reference discloses the usage of

encryption/decryption in conjunction with a MPEG demultiplexor comprising a "first" [45]

and "second data structure" [45] wherein the "control information" or decryption information

associated with the "second data structure" [45] is memory mapped or "accessed based on

addressing information extracted from the first data structure" (Col 4, Line 56 – Col 5, Line

19). Accordingly, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the data structure [205] of Dokic reference to

comprise a "first" and "second data structure" such as those employed by Blatter et al. such

that "responsive to a match" the "addressing information" associated with the "control

information" is "outputted" and "retrieved" for the purpose of advantageously providing a

means to employ encryption/decryption in conjunction with transmitted MPEG video and to

further provide a low-overhead mechanism by which processes can synchronize and communicate while reducing I/O data movement.

Claims 30 and 38 are rejected in view of the rejection of claims 21 and 29. The "method of demultiplexing a digital data stream" in conjunction with a "set-top-box" is met wherein the reference teaches the following steps: "inputting the digital data stream" (Dokic: Figure 3; Col 5, Line 60 – Col 6, Line 9), "storing . . . packet identifiers required by the receiver in a second data structure" [205] (Col 8, Lines 28-31 and 58-60; Col 9, Lines 10-23), and "determining", "extracting", and "demultiplexing" under the control of a "second" and "third control circuit" packets responsive to a "match" (Dokic: Col 8, Lines 20-52; Col 9, Lines 18-43). As aforementioned, the Dokic reference does not explicitly disclose the particular usage of "outputting addressing information" in conjunction with a "first" and "second data structure". The Blatter et al. reference discloses the usage of a "first" [45] and a "second" data structure" [45] whereupon addressing information from the "second data structure" [45] may be utilized to access "control information" associated with the decryption of packets from the "first data structure" [45]. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Dokic reference to further employ a "first" and "second data structure" that employs memory mapping techniques such as those employed by Blatter et al. for the purpose of advantageously providing a means to employ encryption/decryption in conjunction with transmitted MPEG video and to further provide a low-overhead mechanism by which processes can synchronize and communicate while reducing I/O data movement.

In consideration of claims 22-23 and 31-32, the Blatter et al. reference further discloses that the "control information" further identifies "destination address information" (Col 5, Lines 5-8). Accordingly, "the second control circuit" [204] controls the transfer of and/or processes "the input data packet to a destination" such as data buffers [206/208/210] or host microprocessor as "identified by the control information" (Dokic: Col 8, Lines 31-37, 53-67).

Claims 24 and 33 are rejected wherein the Dokic reference teaches that the packet is "discarded" if a "match" is not found (Col 8, Lines 51-52)

Claims 25-26 and 34-35 are rejected wherein the reference teaches a method/apparatus for the interpretation and demultiplexing of received MPEG-2 transport packets (Col 7, Lines 49-59). The MPEG-2 standard (incorporated by reference) defines a transport stream as being logically constructed from a "packetized elementary stream" or PES packets. The instant application further supports this definition (Page 2, Lines 5-8).

In consideration of claims 27 and 36, the component elements of the "input" data stream are well known in the art, as evidenced by the MPEG-2 specification,. Figures 1-2 of the Dokic reference illustrates that the "input data packet comprises program specific information" or PSI tables (Col 2, Lines 3-19). As aforementioned, the receiver uses these PSI tables to derive PIDs that corresponds to desired programming which are subsequently used by the "second control circuit" [204] to "retain only those data packets having sections required by the receiver" (Dokic: Col 2, Lines 29-44; Col 8, Lines 20-31 and 48-52).

Claims 28 and 37 are rejected wherein the "first" and "second control circuits" [204] are embedded within a digital signal processor [106] that is coupled to a PAL [118].

Accordingly, the digital signal processor [106] functions as both a "search engine" to identify

buffered packets and a "transport processor" to move the packets into the appropriate buffer

as aforementioned (Dokic: Col 8, Lines 20-52).

13.   Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dokic (US Pat

No. 5,959,659) in view of Bestler et al. (US Pat No. 5,602,920).

In consideration of claim 42, the Dokic reference does not particularly disclose that the

"input module" [104] further "descrambles a packet in response to the control signal". The

Bestler et al. reference discloses a combined DCAM and transport demultiplexer [20] or

"input module" wherein the "input module descrambles a packet in response to the control

signal" (Bestler et al.: Col 3, Lines 7-44; Col 4, Lines 25-59; Col 4, Line 66 – Col 5, Line

17). Accordingly, it would have been obvious to one having ordinary skill in the art at the

time the invention was made so as to modify the "input module" [104] so as to further

comprise a descrambler which "descrambles a packet in response to the control signal" for

the purpose of providing/enabling greater flexibility in the types of programming (ex.

premium, PPV, or other forms of scrambled programming) with which the Dokic system can

process and to particularly do so using a single circuit optimized to perform both

demultiplexing and conditional access functions (Bestler et al.: Col 1, Lines 49-67).

Allowable Subject Matter

14.   Claims 43 and 44 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims. In particular, based upon the interpretation of the

"input module" and the "control signal" as relied upon in the rejection of claims 39 and 40,

the "input module" of Dokic does not "pass a data payload to the transport controller in

response to the control signal".

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure as follows. Applicant is reminded that in amending in response to a rejection of

claims, the patentable novelty must be clearly shown in view of the state of the art disclosed

by the references cited and the objections made.

- The Robbins et al. (US Pub No. 2004/0004977 A1) reference discloses a circuit and

    method for demultiplexing in a receiver a digital data stream including at least

    two different types of data.

- The MacCormack (US Pat No. 6,859,850) reference discloses a controller for

    controlling direct memory access.

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Beliveau
Examiner
Art Unit 2614

SEB
February 6, 2006